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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,466	08/16/2000	Ilan Frenkel	50325-0104	4567

7590 10/28/2003  
Hickman Palermo Truong & Becker LLP  
1600 Willow Street  
San Jose, CA 95125-5106

EXAMINER

LIN, WEN TAI

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 10/28/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/640,466

Applicant(s)

FRENKEL ET AL.

Examiner

Wen-Tai Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9-22, 24, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 23 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5-8</u> . | 6) <input type="checkbox"/> Other: _____                                    |

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### DETAILED ACTION

1. Claims 1-27 are presented for examination.
2. Claims 11-16 and 23 are objected to because the following terms lack antecedent basis:  
In claim 11, "the currently active directory information tree" and  
"the directory tree manager"; and  
In claim 23, "the validity designation value".

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7, 9-22, 24 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu et al. (hereafter "Chu") [U.S. Pat. No. 6263367] in view of AAPA [Applicant admitted prior art].

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5. As to claim 1, Chu teaches the invention substantially as claimed including: a method of retrieving and storing information using a directory service, comprising the steps of:

- receiving a validity period value [107b, Fig.6(a)] of one of a plurality of directory information trees that are created and stored in the directory service in association with a directory information tree manager [col.2, lines 15-25];
- when information is needed, determining which one of the directory information trees is a currently active directory information tree [col.8, lines 51-58; note that it is obvious that only the relevant directory tree needs to be checked];
- retrieving the information from the currently active directory information tree only during a time period within the validity period value [i.e., within the specified time-to-live period] thereof.

Chu does not specifically teach that the dynamic directory information includes quality of service policy/parameters. However, AAPA teaches that directory service could also be used as repository for storing a representation of quality of service policies and other related information [Specification: page 1, lines 22-24].

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Chu's dynamic directory service management technique (i.e., the server controllable time-to-live mechanism) may also be applied to AAPA's quality of service policy management, because the information variation, as experienced by the

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latter, is similar to that of the former in a network environment, and therefore it should be alleviated by the same mechanism proven to be effective to the former.

6. As to claim 2, AAPA further teaches that a directory information tree becomes available for access only when all read operations and write operations are complete with respect to that directory information tree [Specification: page 4, lines 1-2].

7. As to claim 3, Chu further teaches means for providing, in the directory information tree manager, a reference to one or more old directory information trees for use by a reading process that specifically requests retrieval of obsolete quality of service policy information that is associated with the one or more old directory trees [col.14, lines 12-18].

8. As to claim 4, Chu in view of AAPA teaches that the method further comprising: creating and storing a validity designation value in association with each directory information tree, in which the validity designation value indicates whether the directory information tree is active, old, or to be erased; and retrieving the quality of service policy management information from one directory information tree that has a validity designation value of "active," and only during a time period within the validity period value thereof.

[Figs.3-4; i.e., the time-to-live period becomes expired if it has not been refreshed, and the associated items in the directory is subject to be deleted]

9. As to claim 5, Chu further teaches that deleting an obsolete directory information tree only after its validity period has expired [col.2, lines 34-35].

10. As to claim 7, Chu teaches that the method further comprising the steps of determining that one or more objects in a directory information tree has been modified by a process and rewriting to the directory service only selected units of the directory information tree [i.e., it is obvious that Chu in view of AAPA's directory service would include object modification process so as to keep the directory information up-to-date].

11. As to claims 9-11, since the features of these claims can also be found in claims 1-5 and 7, they are rejected for the same reasons set forth in the rejection of claims 1-5 and 7 above.

As for the additional feature requiring a creation time value be associated with one of the plurality of directory information trees: it is noted that time-stamping a newly created object (e.g., a file creation time) is well known in the art and furthermore, such feature can be viewed as a design variation in specifying a "time-to-live" duration associated with each of the directory objects in Chu and AAPA's system because in order for an object to "time-out" at certain point of time, it also requires a time reference corresponding to the creation time of each associated object.

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12. As to claim 12, Chu further teaches that the quality of service policy information associated with each of the directory information trees comprises a sub-tree of one or more quality of service policies [col.14, lines 48-59].

13. As to claims 13-22, 24 and 26-27, since the features of these claims can also be found in claims 1-5, 7, 9 and 11-12, they are rejected for the same reasons set forth in the rejection of claims 1-5, 7, 9 and 11-12 above.

14. Claims 6, 8, 23 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Asano et al. [U.S. Pat. No. 6327614];

Gai et al. [U.S. Pat. No. 6167445];

Chu et al. [U.S. Pat. No. 6157942]; and

Mohaban et al. [U.S. Pat. No. 6463470].

**16.** A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period

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for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (703)305-4875. The examiner can normally be reached on Monday-Friday(8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)872-9306 for official communications; and

(703)746-5516 for status inquires draft communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Wen-Tai Lin

October 16, 2003

*Wen-Tai Lin*  
10/16/03